

REMARKS

Applicant respectfully requests reconsideration and reexamination of the present application in light of the foregoing amendments and following remarks. The amendments are made without prejudice or disclaimer of the canceled subject matter. Applicants reserve the right to file a continuing or divisional application on any subject matter canceled by way of amendment.

1. Status of the Claims

Claims 13 and 16-26 are pending. The Office Action Summary lists all the pending claims as rejected, although only claims 14-18, 20, 23, and 24 stand rejected under 35 U.S.C. § 103, which is the only rejection on record in the Office Action. Because claims 14-15 are canceled, Applicants assume that the rejected claims are 16-18, 20, 23, and 24. Applicants request clarification in the next communication from the Office.

2. Support for the Amendments

The amendment of claims 13 and 16 is supported, for example, at page 13, lines 22-24 of the specification. New claims 37 and 38 are supported, for example, at page 14, lines 2-8.

3. Request for Consideration of Information Disclosure Statements

Applicants note with appreciation the acknowledgement of the Information Disclosure Statement (IDS) filed September 18, 2007, and the previous acknowledgement of the IDS filed February 16, 2007. Applicants respectfully request similar acknowledgement of the IDSs filed *February 12, 2008* and *December 16, 2005*.

4. Claim Objections

The Office indicates that claims 25 and 26, newly presented in the response filed September 18, 2007, were inadvertently numbered incorrectly. The claims are canceled herein, mooting the objection.

5. Rejection of the Claims Under 35 U.S.C. § 103(a)

Claims 16-18, 20, 23, and 24¹ stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,372,266 (“Suzuki”).

Whether a claim is obvious is based on an objective analysis of the scope and content of the prior art, the differences between the prior art and each element of the claimed invention, the level of skill in the pertinent art, and secondary considerations supporting a conclusion of obviousness or non-obviousness. *See Graham v. John Deere Co.*, 383 U.S. 1, 15-17 (1966); *see also* MPEP § 2141.

In the present case, Applicants have found that proanthocyanidin unexpectedly has a greater effect in reducing muscular fatigue, when proanthocyanidin is administered to a human being in an amount effective to reduce muscular fatigue within one hour before and after physical exercise. *See, e.g.*, Specification, page 13, lines 21-24. This unexpected advantage of the presently claimed method is neither taught nor suggested by the prior art.

Suzuki teaches the use of French maritime pine bark extract containing proanthocyanidins, also known as Pycnogenol, for treating dysmenorrhea² and endometriosis.³ Suzuki, col. 4, lines 18-20 and 25. Suzuki suggests administering Pycnogenol over 14 days from 7 days prior to menstruation, over an entire month, or once a dose of 60 mg. Suzuki, col. 5, lines 2-8. Suzuki does not teach or suggest a method for reducing muscular fatigue, comprising administering proanthocyanidin to a human being in an amount effective to reduce muscular fatigue within one hour before and after physical exercise, as presently claimed.

The Office refers to Maquirriain *et al.*, “The Athlete With Muscular Cramps: Clinical Approach,” *J. Am. Acad. Orthop. Surg.* 15: 425-31 (July 2007) (“Maquirriain”) for the proposition that “muscular cramps (e.g., a leg cramp) are associated with muscular fatigue.” Office Action, pages 3-4. Maquirriain in fact discloses that leg cramps may be “associated” with a wide variety of chronic conditions unrelated to muscle fatigue, e.g., radiculopathies,

¹ See Status of the Claims, above.

² Painful menstruation. *See* The Free Dictionary, at <http://www.thefreedictionary.com/dysmenorrhea>.

³ A condition, usually resulting in pain and dysmenorrhea, that is characterized by the abnormal occurrence of functional endometrial tissue outside the uterus. *See* The Free Dictionary, at <http://www.thefreedictionary.com/endometriosis>.

Parkinson's disease, hypothyroidism, diabetes mellitus, vascular problems, electrolyte disorders, and metabolic myopathies. In any event, Maquirriain says nothing about administering proanthocyanidin to a human being in an amount effective to reduce muscular fatigue within one hour before and after physical exercise, as presently claimed.

The cited references do not teach or suggest all the limitations of the claimed invention. Nor do the cited references suggest that proanthocyanidin has greater effect in reducing muscular fatigue, when proanthocyanidin is administered to a human being in an amount effective to reduce muscular fatigue within one hour before and after physical exercise. This result thus is unexpected. For these reasons, the claims are not *prime facie* obvious over Suzuki, and the rejection should be withdrawn.


CONCLUSION

Should the Examiner have any questions or comments regarding Applicants' amendments or response, the Examiner is asked to contact Applicants' undersigned representative at the telephone number shown below. Please direct all correspondence to the below-listed address.

In the event that the Office believes that there are fees outstanding in the above-referenced matter and for purposes of maintaining pendency of the application, the Office is authorized to charge the outstanding fees to Deposit Account No. 50-0573. The Office is likewise authorized to credit any overpayment to the same Deposit Account Number.

Respectfully submitted,

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